

AMENDMENTS TO THE CLAIMS

The following is a complete listing of revised claims with a status identifier in parenthesis.

LISTING OF CLAIMS

5ms B { 1. (Currently Amended) A system for transporting ATM cells over an IP backbone network, the ATM cells including an ATM destination address, the system comprising:

a source gateway interconnected to the IP backbone network, said source gateway operable to

encapsulate ATM cells with at least one of a TCP/IP or UDP/IP headers to form into-IP packets; and

41 transmit an IP signaling message to said controller upon receipt of an ATM signaling message.

~~a destination gateway interconnected to the IP backbone, said destination gateway operable to receive IP packets from said IP backbone and decapsulate the ATM cells from the IP packets; and~~

~~a controller interconnected to the IP backbone, said controller operable to translate the ATM destination address to a corresponding destination gateway address.~~

2. (Canceled)

3. (Original) The system of claim 2 wherein the ATM signaling message is an ATM UNI signaling message.

4. (Original) The system of claim 2 wherein the IP signaling message follows the H.323 protocol.

5. (Canceled)

6. (Canceled)

7. (Currently Amended) The system of claim 1 wherein said source gateway transmits an ATM UNI signaling message via an intermediate protocol to ~~said~~ a destination gateway upon receipt of a signaling message from ~~said~~ a controller.

8. (Currently Amended) A system for transporting ATM signaling cells and ATM bearer cells over an IP backbone network, the ATM cells including an ATM destination address, the system comprising:

a source gateway interconnected to the IP backbone network, said source gateway operable to encapsulate the received ATM bearer cells with at least one of a TCP/IP or UDP/IP headers to form ~~to~~ IP packets;

~~a destination gateway interconnected to the IP backbone network, said destination gateway operable to receive the IP packets and decapsulate the ATM bearer cells from the IP packets; and~~

~~a controller interconnected to the IP backbone network, said controller operable to translate the ATM destination address to the corresponding destination gateway;~~

wherein said source gateway transmits an IP signaling packet to a said controller upon receipt of ATM signaling cells.

9. (Original) The system of claim 8 wherein the ATM signaling cells are ATM UNI signaling messages.

10. (Original) The system of claim 8 wherein the IP signaling packet follows the H.323 protocol.

11. (Canceled)

12. (Canceled)

13. (Currently Amended) A method for transporting ATM cells over an IP backbone network, said method comprising the steps of:
receiving an ATM signaling cell at a source gateway;

converting the ATM signaling cell to an IP signaling packet using at least one of TCP/IP or UDP/IP protocol;

translating a VCI address in the ATM signaling cell to a corresponding IP address;

receiving ATM bearer cells at the source gateway;

encapsulating ATM bearer cells with IP headers to form IP packets; and
transmitting the IP packets onto an IP backbone network.

14. (Original) The method of claim 13 wherein the step of translating comprises the further steps of:

transmitting an ATM destination address in the ATM cell to a controller;
receiving a corresponding IP address from the controller.

15. (Original) The method of claim 14 wherein the step of receiving a corresponding IP address from the controller is performed via a H.323 protocol message.

16. (Original) The method of claim 13 including the further steps of
transmitting a signaling message to a destination gateway corresponding to the translated IP address.

17. (Original) The method of claim 16 wherein the signaling message to the destination gateway uses Q.2931 signaling format.

18. (Canceled)

19. (Canceled)

20. (Currently Amended) A method for setting up an ATM call over an IP backbone network, said method comprising the steps of:

receiving an ATM signaling cell at a source gateway interconnected to the IP backbone network, the ATM signaling cell including an ATM destination address, a virtual channel information element and a virtual path element;

transmitting a location request message for requesting a location from said source gateway to a controller interconnected to the IP backbone network;

~~transmitting a register message for registering the ATM destination address for translation from the ATM address to an IP address at the controller;~~

transmitting a setup message for translating the virtual channel information element and the virtual path information element from the source gateway to a destination gateway;

~~transmitting an alert message from the destination gateway to the source gateway;~~

~~transmitting a connect message from the destination gateway to the source gateway.~~

21. (New) A system for transporting ATM cells over an IP backbone network, the ATM cells including an ATM destination address, the system comprising:

a source gateway interconnected to the IP backbone network, said ATM source gateway operable to encapsulate ATM cells into IP packets,

wherein said source gateway transmits an IP signaling message to said controller upon receipt of an ATM signaling message; and

wherein the ATM signaling message is an ATM UNI signaling message that follows the H.323 protocol.

22. The method claim 21, further comprising a destination gateway interconnected to the IP backbone network, said destination gateway operable to receive IP packets from said IP backbone network and decapsulate the ATM cells from the IP packets.

23. The method of claim 21, further comprising a controller interconnected to the IP backbone network, said controller operable to translate the ATM destination address to a corresponding destination gateway address.

24. (New) The system of claim 1, further comprising a destination gateway interconnected to the IP backbone network, said destination gateway

operable to receive IP packets from said IP backbone network and decapsulate the ATM cells from the IP packets.

25. (New) The system of claim 1, further comprising a controller interconnected to the IP backbone network, said controller operable to translate the ATM destination address to a corresponding destination gateway address.

26. (New) The system of claim 8, further comprising a destination gateway interconnected to the IP backbone network, said destination gateway operable to receive the IP packets and decapsulate the ATM bearer cells from the IP packets.

27. (New) The system of claim 8, further comprising a controller interconnected to the IP backbone network, said controller operable to translate the ATM destination address to the corresponding destination gateway.

28. (New) The method of claim 20, further comprising the step of:
transmitting a register message for registering the ATM destination address for translation from the ATM address to an IP address at the controller.

29. (New) The method of claim 20, further comprising the steps of;

transmitting an alert message from a destination gateway to the source
gateway; and

transmitting a connect message from the destination gateway to the
source gateway.
